DOCUMENT RESUME

ED 223 707 TM 820 854

TITLE	Gambling Dealer (Amuse. & Rec.) 343.467-018. Development of USES Specific Aptitude Test Battery
INSTITUTION	Employment and Training Administration (DOL), Washington, D.C.
REPORT NO	USES-S-473R82
PUB DATE	82
NOTE	40p.; Pages 22-24 marginally legible due to small print.
PUB TYPE	Reports - Evaluative/Feasibility (142)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	*Aptitude Tests; *Occupational Tests; Personnel Evaluation; Predictive Measurement; *Test Construction; Test Use; Test Validity; *Vocational Aptitude
IDENTIFIERS	*Gambling; Test Batteries; *USES Specific Aptitude Test Battery

ABSTRACT

The United States Employment Service (USES) Specific Aptitude Test Battery (SATB) for Gambling Dealer is evaluated from three points of view: (1) technical adequacy of the research; (2) fairness to minorities; and (3) usefulness of the battery to Job Service staff and employers in selecting individuals for training as Gambling Dealers. Research demonstrated a statistically significant and useful relationship between proficiency as Gambling Dealer and the SATB. The SATB can be expected to produce a useful increase in the proportion of highly competent workers. When the SATB was applied to the validation sample, composed of individuals who were employed and therefore considered competent, an increase from 65 percent to 70 percent in the proportion of highly proficient workers was found. A greater increase can be expected when the battery is used with applicants, as the range of relevant abilities is wider among applicants than among employed workers. The report includes: summary; procedure; analysis; and the validity of the battery. Descriptive statistics for subgroups of the validation sample, descriptive rating scale for trainees, special and standard descriptive rating scales, job duties, and a training course outline are contained in the appendices. (Author/PN)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

Gambling Dealer (amuse. & rec.) 343.467-018

Development of USES Specific Aptitude Test Battery S-473R82

U.S. Department of Labor
Employment and Training Administration
U.S. Employment Service
1982

ED227707

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

S-473R82

DEVELOPMENT OF USES SPECIFIC APTITUDE TEST BATTERY

for

GAMBLING DEALER (amuse. & rec.) 343.467-018

S-473R82

Developed in Cooperation with the Nevada
and New Jersey State Employment Service Agencies

Analysis and Report

by

Northern Test Development Field Center
Detroit, Michigan

U. S. DEPARTMENT OF LABOR

Employment and Training Administration

1982

Acknowledgment

The United States Department of Labor and the Nevada and New Jersey Employment Sertvice Agencies express their sincere gratitude to the following organizations for cooperating in this research:

Atlantic Community College Casino Career Institute, Atlantic City, New Jersey
Bally Park Place Casino, Atlantic City, New Jersey
Caesar's Boardwalk Regency, Atlantic City, New Jersey
Harrah's Club, Reno, Nevada
Harvey's Resort, South Lake Tahoe, Nevada
Resorts Dealer School, Atlantic City, New Jersey
Resorts International Hotel Casino, Atlantic City, New Jersey

TABLE OF CONTENTS

	PAGE
ACKNOWLEDGMENT	ii
SUMMARY	1
PROCEDURE	2
Job Analysis	2
Experimental Test Battery	3
Validation Sample Description	3
Cross-validation Sample Description	3
Criteria for Validation Study	3
Criteria for Cross-validation Study	6
ANALYSIS	6
VALIDITY OF THE BATTERY	9
Criterion Related Validity	9
Effectiveness of the Battery	10
Subgroup Analysis	11
APPENDIX 1	
Descriptive Statistics for Black and Nonminority Subgroups	13
APPENDIX 2	
Descriptive Statistics for Male and Female Subgroups	13
APPENDIX 3	
Descriptive Statistics for Cross-validation Sample	14
APPENDIX 4	
Descriptive Rating Scale for Trainees	15
Special Descriptive Rating Scale	19
Standard Descriptive Rating Scale	22
APPENDIX 5	
Job Duties	25
APPENDIX 6	
Training Course Outlines	29

GATB STUDY NOS. 3056
3068

DEVELOPMENT OF USES SPECIFIC APTITUDE TEST BATTERY

for S-473R82

GAMBLING DEALER (amuse. & rec.) 343.467-018

SUMMARY

This report is designed to provide the information required to evaluate the Specific Aptitude Test Battery (SATB) for Gambling Dealer from three points of view: (1) technical adequacy of the research; (2) fairness to minorities; and (3) usefulness of the battery to Job Service staff and employers in selecting individuals for training as Gambling Dealers.

Research demonstrated a statistically significant and useful relationship between proficiency as Gambling Dealer and the following Specific Aptitude Test Battery:

Aptitudes	Cutting Scores
N - Numerical Aptitude	90
P - Form Perception	100
K - Motor Coordination	90

Data from four different jobs (Dice Dealer, Roulette Dealer, Baccarat Dealer, and Twenty-one Dealer) were combined to form one test battery.

Two samples were used in the research. The validation sample consisted of 933 employed workers (including 124 blacks) from the State of New Jersey. Data were collected during 1978 - 1980. The tests used were those of the General Aptitude Test Battery (GATB). Job proficiency was measured by means of ratings by the instructors and supervisors.

A second sample confirmed or cross-validated the SATB. This sample consisted of 123 employed workers from the State of Nevada. The same experimental tests were used; job proficiency was measured by means of instructor and supervisory ratings. The data were collected in 1977-1978.

No evidence of differences in validity for blacks and nonminorities was found; the SATB was found to be fair to both blacks and nonminorities using several definitions of fairness. Additional information may be found in the Validity of the Battery section in Appendix 1.

No evidence of differences in validity for males and females was found. The battery was found to be fair to males and females using several definitions of fairness. Additional information may be found in the Validity of the Battery section and in Appendix 2.

The SATB can be expected to produce a useful increase in the proportion of highly competent workers. When the SATB was applied to the validation sample, composed of individuals who were employed and therefore considered competent, an increase from 65% to 70% in the proportion of highly proficient workers was found. When the SATB was applied to the cross-validation sample, composed of individuals who were employed and therefore considered competent, an increase from 67% to 71% in the proportion of highly proficient workers was found. A greater increase can be expected when the battery is used with applicants, as the range of relevant abilities is wider among applicants than among employed workers.

PROCEDURE

A longitudinal design was used; GATB test data were collected from Dealer trainees during their first two weeks of training. Instructor's ratings were obtained for each trainee after the training course was completed. Job performance criterion data were not collected until after the dealers had been on the job at least seven months. Data for the validation sample were collected during 1978 - 1980.

Job Analysis

A job analysis was performed by observing the Dealer's performance during training and by consulting with the Dealers' instructors. On the basis of the job analysis, a job description for each job was prepared which was used to choose an appropriate criterion or measure of job performance.

The job descriptions shown in Appendix 5 may be used to provide information on the applicability of the test battery resulting from this research.

In the job analysis, each job duty was rated for frequency of performance, percentage of time spent, and level of difficulty. Critical job duties were identified on the basis of these ratings.

The four jobs were combined into one battery based on the following evidence: 1. The DOT code was the same. 2. The job descriptions were similar. 3. The aptitude ratings were almost identical. 4. The aptitude-criterion correlations were similar. 5. The means and standard deviations of aptitudes were similar.

The aptitudes were rated as irrelevant, important, or critical to performance of the job duties. These ratings were done for each of the four games (Twenty-One, Dice, Roulette and Baccarat) and were almost identical. A synthesis of these ratings and their rationale follows:

N - Numberical Aptitude	Required to collect money and sell chips; to compute total value of cards; to calculate payouts; to count chips; and to compute total value of chips.
P - Form Perception	Required to identify card defects, card values and winning and losing wagers; to recognize value of currency; to scan table layout; to identify ball location.
K - Motor Coordination	Required to stack chips, to slide and position cards; and to manipulate dice.
F - Finger Dexterity	Required to shuffle cards; to grasp chips; and to make payouts.
M - Manual Dexterity	Required to rake in chips; to draw, slide, and scoop up cards; to insert cards in discard holder; to grasp stacks of chips; to manipulate stick to grasp dice; to lift and invert bowl to drop dice; and to pick up and place dice in bowl.

Experimental Test Battery

The experimental test battery consisted of all 12 tests of the GATB, B-1002A. Information on the composition and developmental research of the GATB may be found in Manual for the General Aptitude Test Battery, Section III, Development, available from the Government Printing Office.

Validation Sample Description

The validation sample consisted of 933 Dealers (392 females and 541 males) employed in the North, (see Appendix 2). A total of 177 were minority group members (124 blacks, 18 Orientals, 20 Hispanics, 10 American Indians and 5 French Canadians), and 756 were nonminority group members. The means and standard deviations for age and education of sample members are shown in Table 1.

Some of the sample members were given parts of Measurement of Skill and Differential Aptitude Test before selection. All sample members were doing duties similar to those found in the job descriptions in Appendix 5. Descriptive statistics for black and nonminority subgroups are shown in Appendix 1. Descriptive statistics for male and female subgroups are shown in Appendix 2.

Cross-validation Sample Description

The cross-validation sample consisted of 123 Dice and Twenty-one Dealers (61 females, 62 males) employed in the West. A total of 11 were minority group members (10 Hispanic, 1 Oriental), and 112 were nonminority group members. The means and standard deviations for age and education of sample members are shown in Table 1a.

Criteria for Validation Study

The criteria for the validation sample consisted of instructor and supervisory ratings. The instructor and immediate supervisor rated each worker. The ratings were obtained by means of personal visits of State test development analysts who explained the rating procedure to the instructors and supervisors. For all but 78 of the sample members, two different instructors rated each trainee at the completion of the course. Scheduling problems necessitated getting pooled instructor ratings for 78 sample members. The ratings were completed by six instructors based on their viewing of videotapes of trainees' performance. A description of the training curriculum is shown in Appendix 6. Two ratings were obtained from each supervisor with an interval of at least two weeks between the ratings. Since sample members' test scores are confidential, instructors and supervisors had no knowledge of the test scores of workers.

A descriptive rating scale for trainees was used to obtain instructors' ratings. The scale (see Appendix 4) consists of seven items. Six of these items cover different aspects of job performance. The seventh item is a global item on Gambling Dealers "all-around" ability. Each item has five alternative responses corresponding to different degrees of job proficiency. For the purpose of scoring the items, weights of 1 to 5 were assigned to the responses. The total score on the rating scale is the sum of the weights for the seven items. The possible range for each rating is 7-35.

A review of the course outline for Gambling Dealer trainees indicated that the items covered by the rating scale were directly related to important aspects of job related training.

A. Aptitude or facility: A trainee must have the potential to learn the job.

B. Quantity: A trainee must meet standards of accomplishment in learning the skills and knowledge required in the training program.

C. Quality: A trainee must perform assignments carefully and completely.

D. Quickness in learning instructional units: A trainee must demonstrate the ability to grasp important concepts and learn manipulative skills quickly to be successful in job related training.

E. Skill in use of equipment: A trainee must demonstrate knowledge and skill in making proper and efficient use of equipment in job related training.

F. Variety of duties performed efficiently: A trainee must acquire a wide variety of knowledge and skills to successfully complete formal job related training.

G. General performance: Successful completion of training for Gambling Dealer involves a combination of the above aspects of learning ability.

A specially designed descriptive rating scale was used to obtain supervisory ratings. The scale (see appendix 4) consists of five items. Four of these items cover different aspects of job performance. The fifth item is a global item on the Gambling Dealers "all-around" ability. Each item has five alternative responses corresponding to different degrees of job proficiency. For the purpose of scoring the items, weights of 1 to 5 were assigned to the responses. The total score on the rating scale is the sum of the weights for the five items. The possible range for each rating is 5-25.

A review of the job descriptions indicated that the items covered by the rating scale were directly related to important aspects of job duties performed by Gambling Dealers.

A. Maintaining pace of game: A Dealer must conduct the flow of the game in a satisfactory manner.,

B. Accuracy: A Dealer must be accurate in calculating odds, counting totals, payoff and making change.

C. Conducting activities or play of game: A Dealer must maintain control of the game.

D. Handling and manipulating equipment: A Dealer must efficiently handle and manipulate equipment.

E. "All-around" job ability: A Dealer's value involves a combination of aspects of job performance listed above.

A reliability coefficient of .56 was obtained between the two instructor ratings and a reliability coefficient of .60 was obtained between the two supervisory ratings, indicating significant relationships. Therefore, the final criterion score consists of the combined scores of the instructor ratings and combined scores

of the supervisory ratings. The possible range for the combined scores of the instructor ratings is 14-70; and for supervisory ratings is 10-50. The actual range of instructor ratings for the total sample is 20-70. The mean is 49.2 with a standard deviation of 8.1. The actual range of supervisory ratings for the total sample is 14-50. The mean is 35.8 with a standard deviation of 6.2. The relationship between the criteria and age and education is shown in Table 1.

TABLE 1

Means, Standard Deviations (SD) and Pearson Product-Moment Correlations with the Instructor Ratings (r1) and Supervisor Ratings (r2) for Age and Education

Validation Sample
N = 933

	Mean	SD	r1	r2
Age (years)	27.6	6.8	-0.09**	-0.24**
Education (years)	13.5	1.8	0.06	0.07*

*Significant at the .05 level
**Significant at the .01 level

TABLE 1a

Cross-Validation Sample
N = 123

	Mean	SD	r1	r2
Age (years)	28.7	7.4	-0.27**	-0.21**
Education (years)	13.3	1.7	0.03	0.01

**Significant at the .01 level

The correlation between the combined instructor ratings and combined supervisory ratings was .28. The fact that this correlation is low indicates that the two criteria measure different aspects of performance. Therefore, the final criterion consists of a multiple hurdle combination of the summed instructor ratings and summed supervisory ratings. For the purpose of analysis, the criterion distribution was dichotomized so as to include, as nearly as possible, one-third of the sample in the low criterion group and two-thirds in the high criterion group. This procedure is standard for SATB studies. A cutting score of 42 for the training criterion together with a cutting score of 33 for for the job performance criterion placed 35% of the total sample in the low criterion group and 65% in the high criterion group.

Criteria for Cross-Validation Study

The criteria for the cross-validation sample also consisted of instructor and supervisory ratings. After two months in the program a single instructor rating was obtained for each member of the cross-validation sample. The same seven item Descriptive Rating Scale for trainees was used as for the validation sample (Appendix 4). After four months, two supervisory ratings were collected using the standard Descriptive Rating Scale (Appendix 4). The reliability between the instructor rating and the sum of the supervisory ratings was .79. In order to provide equal weighting between the instructor and supervisory ratings, scores from the instructor rating were converted into a distribution with the same mean and standard deviation as the supervisory ratings. The relationship between the criteria and age and education is shown in Table 1a. The criterion distribution was dichotomized as for the validation sample. The criterion cutting score was set at 68 which placed 33% of the cross-validation sample in the low criterion group and 67% in the high criterion group. The relationship between the criteria and age and education is shown in Table 1a.

ANALYSIS

The initial step in the analysis is to identify those aptitudes which show some evidence of validity and job relatedness. This evidence can be:

1. Statistical evidence of the correlation (r) between the test and the criterion,

2. Content validity as evidenced by a rating of "critical" based on the job analysis or

3. Any combination of the following

   . high mean

   . low standard dev.ation (SD)

   . rating of "important " based on the job analysis

Statistical results for the validation sample are shown in Table 2.

TABLE 2

Statistical Results for Total Validation Sample
N = 933

Aptitude	Mean	SD	r1	r2
G - General Learning Ability	109.0	14.1	.22**	.16**
V - Verbal Aptitude	108.2	14.2	.13**	.10**
N - Numerical Aptitude	109.7	13.8	.22**	.17**
S - Spatial Aptitude	105.1	17.9	.18**	.13**
P - Form Perception	118.2	17.1	.23**	.26**
Q - Clerical Perception	119.6	15.5	.15**	.21**
K - Motor Coordination	113.4	17.2	.13**	.22**
F - Finger Dexterity	109.0	19.4	.17**	.26**
M - Manual Dexterity	119.5	20.6	.15**	.22**

**Significant at the .01 level

TABLE 3

Statistical Results for Twenty-one Dealer
N = 397

Aptitude	Mean	SD	r1	r2
G - General Learning Ability	106.6	14.1	.25**	.18**
V - Verbal Aptitude	107.3	14.2	.13**	.14**
N - Numerical Aptitude	107.3	13.9	.28**	.20**
S - Spatial Aptitude	102.7	17.3	.19**	.12*
P - Form Perception	116.5	17.5	.25**	.30**
Q - Clerical Perception	119.0	14.8	.22**	.27**
K - Motor Coordination	112.5	17.2	.12*	.19**
F - Finger Dexterity	107.7	19.9	.12*	.24**
M - Manual Dexterity	115.7	20.9	.12*	.23**

*Significant at the .05 level
**Significant at the .01 level

TABLE 4

Statistical Results for Dice Dealer
N = 325

Aptitude	Mean	SD	r1	r2
G - General Learning Ability	111.7	13.7	.29**	.15**
V - Verbal Aptitude	109.5	14.2	.20**	.06
N - Numerical Aptitude	112.3	13.3	.23**	.14*
S - Spatial Aptitude	106.9	18.7	.24**	.13*
P - Form Perception	117.6	17.2	.27**	.24**
Q - Clerical Perception	118.1	15.6	.18**	.12*
K - Motor Coordination	113.2	16.5	.17**	.23**
F - Finger Dexterity	107.2	18.1	.24**	.27**
M - Manual Dexterity	121.7	20.4	.21**	.26**

*Significant at the 05 level
**Significant at the .01 level

TABLE 5

Statistical Results for Roulette Dealer
N = 141

Aptitude	Mean	SD	r1	r2
G - General Learning Ability	110.6	13.1	.06	.16
V - Verbal Aptitude	108.7	13.5	-.09	.10
N - Numerical Aptitude	111.5	13.3	.12	.22**
S - Spatial Aptitude	107.9	18.0	.08	.13
P - Form Perception	123.9	16.1	.21*	.18*
Q - Clerical Perception	124.7	16.9	-.02	.14
K - Motor Coordination	116.2	18.0	.18*	.28**
F - Finger Dexterity	116.3	19.2	.23**	.27**
M - Manual Dexterity	122.9	19.1	.27**	.25**

*Significant at the .05 level
**Significant at the .01 level

TABLE 6

Statistical Results for Baccarat Dealer
N = 70

Aptitude	Mean	SD	r1	r2
G - General Learning Ability	107.3	14.8	.26*	.32**
V - Verbal Aptitude	105.8	14.8	.03	.28*
N - Numerical Aptitude	108.0	13.2	.28*	.28*
S - Spatial Aptitude	104.3	15.5	.30*	.22
P - Form Perception	119.1	14.6	.28*	-.01
Q - Clerical Perception	120.0	13.4	.10	.15
K - Motor Coordination	114.4	17.9	.04	.11
F - Finger Dexterity	109.8	18.7	.20	-.07
M - Manual Dexterity	124.0	19.4	.27*	.04

*Significant at the .05 level
**Significant at the .01 level

Table 7 summarizes the qualitative analysis and statistical results shown in Table 2 and shows the aptitudes considered for inclusion in the battery.

TABLE 7

Summary of Qualitative and Quantitative Data
for Validation Sample

	Aptitude								
Type of Evidence	G	V	N	S	P	Q	K	F	M
Job Analysis Ratings									
Critical									
Important			X		X		X	X	X
Irrelevant									
Statistical Evidence									
High Mean					X	X			X
Low SD	X	X	X						
Significant r									
Instructor Rating Criterion	X	X	X	X	X	X	X	X	X
Supervisor Rating Criterion	X	X	X	X	X	X	X	X	X
Aptitudes Considered for Inclusion in the Battery	G	V	N	S	P	Q	K	F	M

The information in Table 7 indicates that all nine aptitudes should be considered for inclusion in the battery. The objective is to develop a battery of 2, 3 or 4 aptitudes with cutting scores at the point (a) where about the same percent will meet the cutting scores as the percent placed in the high criterion group and (b) which will maximize the relationship between the battery and the criterion.

The cutting scores are set at about one standard deviation below the mean aptitude scores of the sample, with the deviations at five point intervals above and below these points to achieve the objectives indicated above.

The following battery resulted:

Aptitudes	Cutting Scores
N - Numerical Aptitude	90
P - Form Perception	100
K - Motor Coordination	90

VALIDITY OF THE BATTERY

This section of the report first presents evidence of criterion-relation validity of the SATB on the validation sample and all relevant subsamples. Next, it provides information on effectiveness and fairness of test norms.

Criterion Related Validity

Table 8 shows that there is a significant relationship between the job performance criteria and the SATB for the total validation sample, blacks, nonminorities, females, males, and for the cross-validation sample; the difference between validities for the different jobs is not statistically significant (highest CR= 1.66).

TABLE 8

Validity of Battery

Sample	N	High Criterion Group: Below Cutting Scores	High Criterion Group: Meeting Cutting Scores	Low Criterion Group: Below Cutting Scores	Low Criterion Group: Meeting Cutting Scores	Chi Square	Significance Level p/2<	Phi Coefficient
Total	933	112	491	121	209	37.3	.0005	.20
Black	124	22	41	36	25	7.2	.005	.24
Nonminority	756	80	427	75	174	21.1	.0005	.17
Female	392	42	234	40	76	18.3	.0005	.22
Male	541	70	257	81	133	17.4	.0005	.18
Dice Dealer	325	29	137	51	108	9.3	.005	.17
Roulette Dealer	141	13	93	10	25	4.0*	.025	.17
Baccarat Dealer	70	5	42	4	19	0.2*	.17**	.05
Twenty-one Dealer	397	65	219	56	57	27.1	.0005	.26
Cross-Validation Sample	123	7	76	9	31	3.6*	.05	.17

*Yates' corrected
**Computed using Fisher's Exact Probability Test

Multiple regression analysis was conducted between aptitudes N, P, and K and the criterion. A multiple correlation of 0.25 (significant at the .01 level) was obtained between the job performance criterion and aptitudes N, P, and K.

Effectiveness of the Battery

The level of validity shown in Table 8 indicates the battery will be useful in selection. In the total validation sample, 65% were considered to be highly proficient. Of those who met the cutting scores, 70% were highly proficient, an increase of 5 percentage points over the existing selection method. These findings are shown in Table 9.

TABLE 9

Effectiveness of the Battery

SELECTION SYSTEM	NUMBER SELECTED	HIGHLY PROFICIENT (HIGH CRITERION GROUP)		MARGINAL (LOW CRITERION GROUP)	
		N	%	N	%
Validation Sample					
Without Tests	933	603	65	330	35
With Tests	700	491	70	209	30
Cross-validation Sample					
Without Tests	123	83	67	40	33
With Tests	107	76	71	31	29

Subgroup Analysis

No difference in the validities for blacks and nonminorities was found for this battery; the difference between phi coefficients for blacks and nonminorities for the total validation sample is not statistically significant (CR = .79).

The battery is fair to blacks since the proportion of both black and nonminorities who met the cutting scores approximated the proportion who were in the high criterion group; 53% of the blacks met the cutting scores and 51% were in the high criterion group; 79% of the nonminorities met the cutting scores and 67% were in the high criterion group.

No difference in the validities for males and females was found for this battery; the difference between the phi coefficients for the male and female subgroups is not satistically significant (CR = .58).

The battery is fair to females since the proportion of both females and males who met the cutting scores approximated the proportion who were in the high criterion group; 79% of the females met the cutting scores and 70% were in the high criterion group; 72% of the males met the cutting scores and 60% were in the high criterion group.

APPENDIX 1

Descriptive Statistics for Black and Nonminority Subgroups of Validation Sample

	Black (N=124)			Nonminority (N=756)		
Variable	Mean	SD	Range	Mean	SD	Range
Aptitude G	96.9	12.4	72-131	111.4	13.2	69-154
Aptitude V	99.4	13.8	70-129	110.2	13.4	70-160
Aptitude N	100.3	13.0	63-127	111.6	13.2	69-148
Aptitude S	94.8	16.3	58-133	106.7	17.5	55-156
Aptitude P	109.1	19.2	70-165	119.8	16.3	68-164
Aptitude Q	112.9	15.1	81-158	120.9	15.3	80-185
Aptitude K	108.0	16.2	66-140	114.4	17.0	49-161
Aptitude F	102.3	20.1	60-162	109.9	19.0	43-168
Aptitude M	110.2	19.8	64-164	121.1	20.4	57-196
Criterion I	45.7	9.1	20-70	49.7	7.8	28-70
Criterion II	33.5	5.7	17-49	36.2	6.1	14-50
Age	28.8	6.9	19-57	27.3	6.7	18-57
Education	13.2	1.7	8-17	13.6	1.8	8-17

APPENDIX 2

Descriptive Statistics for Male and Female Subgroups of Validation Sample

	Male (N=541)			Female (N=392)		
Variable	Mean	SD	Range	Mean	SD	Range
Aptitude G	110.1	14.3	69-154	107.5	13.7	72-143
Aptitude V	107.3	14.5	63-152	109.4	13.6	72-160
Aptitude N	111.2	13.5	63-148	107.7	13.8	65-148
Aptitude S	105.5	18.9	55-156	104.5	16.4	58-156
Aptitude P	115.7	17.0	68-163	121.7	16.6	81-165
Aptitude Q	116.7	14.8	80-173	123.6	15.5	81-185
Aptitude K	111.5	17.5	49-161	116.1	16.4	60-159
Aptitude F	104.5	19.0	43-167	115.1	18.2	56-168
Aptitude M	119.9	21.2	57-196	119.0	19.8	59-168
Criterion I	49.2	8.2	20-70	49.1	8.1	23-70
Criterion II	35.2	6.3	14-50	36.6	5.9	20-50
Age	28.4	7.4	18-57	26.5	5.6	18-56
Education	13.7	1.8	8-17	13.3	1.7	9-17

APPENDIX 3

Descriptive Statistics for Cross-validation Sample

(N=123)

Variable	Mean	SD	Range
Aptitude G	114.8	14.7	80-154
Aptitude V	114.8	17.2	78-189
Aptitude N	110.8	14.5	76-1[illegible]
Aptitude S	114.7	17.3	74-163
Aptitude P	132.3	17.9	83-172
Aptitude Q	130.8	17.3	85-175
Aptitude K	121.1	14.5	82-159
Aptitude F	107.9	20.4	72-168
Aptitude M	113.9	18.1	64-162
Criterion I	45.7	11.7	14-70
Criterion II	36.9	7.5	20-60
Age	28.7	7.4	21-58
Education	13.3	1.7	8-18

APPENDIX 4

RATING TRAINEES

SUGGESTIONS TO RATERS

We are asking you to rate the job performance of the trainees whom you instructed. These ratings will serve as a "yardstick" against which we can compare the test scores in this study. The ratings must give a true picture of each trainee or this study will have very little value. You should strive to give the most accurate ratings possible for each trainee.

These ratings are strictly confidential and won't affect your trainees in any way. Neither the ratings nor test scores of any trainee will be shown to anyone other than personnel of the ESC testing section. We are interested in only "testing the tests." Ratings are needed for only those trainees who are in the test study.

In making ratings, don't let general impressions or some outstanding trait affect your judgment. Try to forget your personal feelings about the trainee. Rate him only on his performance. Here are some additional points which might help you:

1. Please read and study all directions and the rating scale thoroughly before rating a trainee.
2. For each question compare your trainees with "trainees in general" for this type of vocational training. We want the ratings to be based on the same standards in all training courses covering the same occupation.
3. A suggested method is to rate all trainees on one question at a time. The questions pertain to the different abilities of the trainees. A trainee may be good in one ability and poor in another; for example, a very slow trainee may be very accurate. So rate all trainees on the first question, then rate all trainees on the second question, and so on.
4. Rate the trainees according to the work they have done throughout the entire vocational training course. Don't rate just on the basis of one "good" day, one "bad" day or some single incident. Think in terms of each trainee's usual or typical day by day performance.
5. Rate only on the abilities listed on the rating sheet. Do not let factors such as cooperativeness, ability to get along with others, promptness and honesty influence your ratings. Although these aspects of a worker are important, they are of no value for this study as a "yardstick" against which to compare aptitude test scores.

Please fill in the information requested below.

RATED BY _____ TITLE _____

LOCATION OF TRAINING _____ DATE _____
(City) (State)

UNITED STATES TRAINING AND EMPLOYMENT SERVICE

DESCRIPTIVE RATING SCALE FOR TRAINEES

(For Trainees Used in Aptitude Test Development Studies)

Score _____

RATING SCALE FOR _____
(DOT Title and Code for Training Course)

Directions: Please read "the suggestions to raters" on the back of this form then complete this rating scale. In making your ratings, only one box should be checked for each question.

Name of trainee (print) _____ _____
(Last) (First)

Sex: Male _____ Female _____

A. How much aptitude or facility does he have for the vocational training? (Trainee's adeptness or knack for performing the work easily and well.)

☐ 1. Has great difficulty doing the work. Not at all suited for the training.

☐ 2. Usually has some difficulty doing the work. Not too well suited for the training.

☐ 3. Does the work without too much difficulty. Fairly well suited for the training.

☐ 4. Usually does the work without difficulty. Well suited for the training.

☐ 5. Does the work with great ease. Exceptionally well suited for the training.

B. How much ability does he have for maintaining adequate production in the vocational activity for which he was trained?

- ☐ 1. Capable of very low work output. Can perform only at an unsatisfactory pace.
- ☐ 2. Capable of low work output. Can perform at a slow pace.
- ☐ 3. Capable of fair work output. Can perform at an acceptable but not a fast pace.
- ☐ 4. Capable of high work output. Can perform at a fast pace.
- ☐ 5. Capable of very high work output. Can perform at an unusually fast pace.

C. How good was the quality of his work during the vocational training?

- ☐ 1. Performance was inferior and almost never met minimum quality standards.
- ☐ 2. Performance was usually acceptable but somewhat inferior in quality. The grade of his work could stand improvement.
- ☐ 3. Performance was acceptable but usually not superior in quality.
- ☐ 4. Performance was usually superior in quality.
- ☐ 5. Performance was almost always of the highest quality.

D. How quickly did he learn the instructional units of the vocational training?

- ☐ 1. Learned the work very slowly. Needed careful and repeated instructions.
- ☐ 2. Learned the work somewhat slower than most.
- ☐ 3. Learned most of the work in the usual amount of time.
- ☐ 4. Learned most of the work quickly.
- ☐ 5. Learned all of the work very rapidly. Needed only the minimum amount of training or instructions for even the difficult aspects.

E. How much ability does he have for using the equipment of the vocational training?

- ☐ 1. Has very limited ability. Cannot use the equipment adequately.
- ☐ 2. Has little ability. Can use the equipment to "get by."
- ☐ 3. Has a moderate amount of ability. Can use the equipment to do fair work.
- ☐ 4. Has high ability. Can use the equipment to do good work.
- ☐ 5. Has very high ability. Can use the equipment to do excellent work.

F. How large a variety of job duties can be performed efficiently?

- ☐ 1. Cannot perform different operations adequately.
- ☐ 2. Can perform a limited number of different operations efficiently.
- ☐ 3. Can perform several different operations with reasonable efficiency.
- ☐ 4. Can perform many different operations efficiently.
- ☐ 5. Can perform an unusually large variety of different operations efficiently.

G. Considering all the factors already rated, and only these factors, how acceptable was his performance during vocational training?

- ☐ 1. Performance was unsatisfactory.
- ☐ 2. Performance was not completely satisfactory.
- ☐ 3. Performance was satisfactory.
- ☐ 4. Performance was good.
- ☐ 5. Performance was outstanding.

Complete the following ONLY if the workers is no longer in the training course he or she was in when tested.

H. What do you think is the reason this person left the training course? (It is not necessary to show the official reason if you feel that there is another reason, as this form will not be shown to anybody in the school or company.)

- ☐ 1. Dismissed because of inability to do the training course work.
- ☐ 2. Quit, and I feel that it was because of difficulty doing the training course work.
- ☐ 3. Dismissed for reasons other than ability to do the training course work (e.g., absenteeism)
- ☐ 4. Quit, and I feel the reason for quitting was not related to ability to do the training course work.

Rated By	Title	Date
Company or Organization	Location (City, State, ZIP Code)	

U.S. DEPARTMENT OF LABOR • MANPOWER ADMINISTRATION

SPECIAL **DESCRIPTIVE RATING SCALE**

SCORE _____

RATING SCALE FOR _____

D.O.T. Title and Code

Directions: Please read the "Suggestions to Raters" and then fill in the items which follow. In making your ratings, only one box should be checked for each question.

SUGGESTIONS TO RATERS

We are asking you to rate the job performance of the people who work for you. These ratings will serve as a "yardstick" against which we can compare the test scores in this study. The ratings must give a true picture of each worker or this study will have very little value. You should try to give the most accurate ratings possible for each worker.

These ratings are strictly confidential and won't affect your workers in any way. Neither the ratings nor test scores of any workers will be shown to anybody in your company. We are interested only in "testing the tests." Ratings are needed only for those workers who are in the test study.

Workers who have not completed their training period, or who have not been on the job or under your supervision long enough for you to know how well they can perform this work should not be rated. Please inform the test technician about this if you are asked to rate any such workers.

Complete the last question only if the worker is no longer on the job.

In making ratings, don't let general impressions or some outstanding trait affect your judgment. Try to forget your personal feelings about the worker. Rate only on the work performed. Here are some more points which might help you:

1. Please read all directions and the rating scale thoroughly before rating.

2. For each question compare your workers with "workers-in-general" in this job. That is, compare your workers with other workers on this job that you have known. This is very important in small plants where there are only a few workers. We want the ratings to be based on the same standard in all the plants.

3. A suggested method is to rate all workers on one question at a time. The questions ask about different abilities of the workers. A work may be good in one ability and poor in another: for example, a very slow worker may be accurate. So rate all workers on the first question, then rate all workers on the second question, and so on.

4. Practice and experience usually improve a worker's skill. However, one worker with six months' experience may be a better worker than another with six years' experience. Don't rate one worker as poorer than another merely because of a lesser amount of experience.

5. Rate the workers according to the work they have done over a period of several weeks or months. Don't rate just on the basis of one "good" day, or one "bad" day or some single incident. Think in terms of each worker's usual or typical performance.

6. Rate only the abilities listed on the rating sheet. Do not let factors such as cooperativeness, ability to get along with others, promptness and honesty influence your ratings. Although these aspects of a worker are important, they are of no value for this study as a "yardstick" against which to compare aptitude test scores.

NAME OF WORKER (Print) (Last) (First)

SEX: MALE_____ FEMALE_____

Company Job Title:_____

How often do you see this worker in a work situation?

/ / All the time.

/ / Several times a day.

/ / Several times a week.

/ / Seldom.

How long have you worked with this worker?

/ / Under one month.

/ / One to two months.

/ / Three to five months.

/ / Six months or more.

A. How well does the dealer maintain the pace of the game? (Dealer's ability to conduct the flow and tempo of the game in relation to the players.)

/ / 1. The pace at which the dealer conducts the game is unsatisfactory.

/ / 2. The pace at which the dealer conducts the game is below average.

/ / 3. The pace at which the dealer conducts the game is satisfactory.

/ / 4. The pace at which the dealer conducts the game is above average.

/ / 5. The pace at which the dealer conducts the game is outstanding.

B. How accurate is the dealer in the various functions of the game, such as calculating odds, counting totals, paying off, or making change?

/ / 1. Makes very many mistakes. Work needs constant correcting.

/ / 2. Makes frequent mistakes. Work needs more correcting than is desirable.

/ / 3. Makes mistakes occasionally. Work needs only normal correcting.

/ / 4. Makes few mistakes. Work seldom needs correcting.

/ / 5. Rarely makes a mistake. Work almost never needs correcting.

C. How well does the dealer conduct the activities or play of the game?

/ / 1. Has poor ability in conducting game. Loses control of game frequently.

/ / 2. Has limited ability in conducting game. Occasionally loses control of game.

/ / 3. Has average ability in conducting game. Usually controls game at acceptable level.

/ / 4. Has good ability in conducting game. Seldom loses control of game.

/ / 5. Has outstanding ability in conducting game. Almost always has complete control of game.

D. How well does the dealer handle and manipulate the equipment (such as chips cards, etc.) of the game?

/ / 1. Clumsy. Has difficulty handling equipment adequately.

/ / 2. Has limited ability. Handles equipment with some difficulty.

/ / 3. Has average ability. Handles equipment with reasonable efficiency.

/ / 4. Performance is above average. Has good ability in handling equipment.

/ / 5. Performs at an outstanding level. Has excellent ability in handling equipment.

E. Considering all the factors already rated, and only these factors, how good is this dealer? (Dealer's all-around ability to do the job.)

/ / 1. Performance usually not acceptable.

/ / 2. Performance somewhat inferior.

/ / 3. A fairly proficient worker.

/ / 4. Performance usually superior.

/ / 5. An unusually competent worker.

Complete the following ONLY if the dealer is no longer on the job.

F. What do you think is the reason this person left the job? (It is not necessary to show the official reason if you feel that there is another reason, as this form will not be shown to anybody in the company.)

/ / 1. Fired because of inability to do the job.

/ / 2. Quit, and I feel that it was because of difficulty doing the job.

/ / 3. Fired or laid off for reasons other than ability to do the job (i.e., absenteeism, reduction in force.)

/ / 4. Quit, and I feel the reason for quitting was not related to ability to do the job.

/ / 5. Quit or was promoted or reassigned because the dealer had learned the job well and wanted to advance.

RATED BY	TITLE	DATE
COMPANY OR ORGANIZATION	LOCATION (City, State, ZIP Code)	

U.S. DEPARTMENT OF LABOR • MANPOWER ADMINISTRATION

DESCRIPTIVE RATING SCALE

SCORE _____

RATING SCALE FOR _____

D.O.T. Title and Code

Directions: Please read the "Suggestions to Raters" and then fill in the items which follow. In making your ratings, only one box should be checked for each question.

SUGGESTIONS TO RATERS

We are asking you to rate the job performance of the people who work for you. These ratings will serve as a "yardstick" against which we can compare the test scores in this study. The ratings must give a true picture of each worker or this study will have very little value. You should try to give the most accurate ratings possible for each worker.

These ratings are strictly confidential and won't affect your workers in any way. Neither the ratings nor test scores of any workers will be shown to anybody in your company. We are interested only in "testing the tests." Ratings are needed only for those workers who are in the test study.

Workers who have not completed their training period, or who have not been on the job or under your supervision long enough for you to know how well they can perform this work should not be rated. Please inform the test technician about this if you are asked to rate any such workers.

Complete the last question only if the worker is no longer on the job.

In making ratings, don't let general impressions or some outstanding trait affect your judgment. Try to forget your personal feelings about the worker. Rate only on the work performed. Here are some more points which might help you:

1. Please read all directions and the rating scale thoroughly before rating.

2. For each question compare your workers with "workers-in-general" in this job. That is, compare your workers with other workers on this job that you have known. This is very important in small plants where there are only a few workers. We want the ratings to be based on the same standard in all the plants.

3. A suggested method is to rate all workers on one question at a time. The questions ask about different abilities of the workers. A worker may be good in one ability and poor in another: for example, a very slow worker may be accurate. So rate all workers on the first question, then rate all workers on the second question, and so on.

4. Practice and experience usually improve a worker's skill. However, one worker with six months' experience may be a better worker than another with six years' experience. Don't rate one worker as poorer than another merely because of a lesser amount of experience.

5. Rate the workers according to the work they have done over a period of several weeks or months. Don't rate just on the basis of one "good" day, or one "bad" day or some single incident. Think in terms of each worker's usual or typical performance.

6. Rate only the abilities listed on the rating sheet. Do not let factors such as cooperativeness, ability to get along with others, promptness and honesty influence your ratings. Although these aspects of a worker are important, they are of no value for this study as a "yardstick" against which to compare aptitude test scores.

MA 7-66
Apr. 1973

NAME OF WORKER (Print) (Last) (First)

SEX: MALE_____ FEMALE_____

Company Job Title: _____

How often do you see this worker in a work situation?

- ☐ All the time.
- ☐ Several times a day.
- ☐ Several times a week.
- ☐ Seldom.

How long have you worked with this worker?

- ☐ Under one month.
- ☐ One to two months.
- ☐ Three to five months.
- ☐ Six months or more.

A. How much can this worker get done? (Worker's ability to make efficient use of time and to work at high speed.) (If it is possible to rate only the quantity of work which a person can do on this job as adequate or inadequate, use #2 to indicate "inadequate" and #4 to indicate "adequate.")

- ☐ 1. Capable of very low work output. Can perform only at an unsatisfactory pace.
- ☐ 2. Capable of low work output. Can perform at a slow pace.
- ☐ 3. Capable of fair work output. Can perform at an acceptable pace.
- ☐ 4. Capable of high work output. Can perform at a fast pace.
- ☐ 5. Capable of very high work output. Can perform at an unusually fast pace.

B. How good is the quality of work? (Worker's ability to do high-grade work which meets quality standards.)

- ☐ 1. Performance is inferior and almost never meets minimum quality standards.
- ☐ 2. Performance is usually acceptable but somewhat inferior in quality.
- ☐ 3. Performance is acceptable but usually not superior in quality.
- ☐ 4. Performance is usually superior in quality.
- ☐ 5. Performance is almost always of the highest quality.

C. How accurate is the work? (Worker's ability to avoid making mistakes.)

- ☐ 1. Makes very many mistakes. Work needs constant checking.
- ☐ 2. Makes frequent mistakes. Work needs more checking than is desirable.
- ☐ 3. Makes mistakes occasionally. Work needs only normal checking.
- ☐ 4. Makes few mistakes. Work seldom needs checking.
- ☐ 5. Rarely makes a mistake. Work almost never needs checking.

D. How much does the worker know about the job? (Worker's understanding of the principles, equipment, materials and methods that have to do directly or indirectly with the work.)

- ☐ 1. Has very limited knowledge. Does not know enough to do the job adequately.
- ☐ 2. Has little knowledge. Knows enough to get by.
- ☐ 3. Has moderate amount of knowledge. Knows enough to do fair work.
- ☐ 4. Has broad knowledge. Knows enough to do good work.
- ☐ 5. Has complete knowledge. Knows the job thoroughly.

E. How large a variety of job duties can the worker perform efficiently? (Worker's ability to handle several different operations.)

- ☐ 1. Cannot perform different operations adequately.
- ☐ 2. Can perform a limited number of different operations efficiently.
- ☐ 3. Can perform several different operations with reasonable efficiency.
- ☐ 4. Can perform many different operations efficiently.
- ☐ 5. Can perform an unusually large variety of different operations efficiently.

F. Considering all the factors already rated, and only these factors, how good is this worker? (Worker's all-around ability to do the job.)

- ☐ 1. Performance usually not acceptable.
- ☐ 2. Performance somewhat inferior.
- ☐ 3. A fairly proficient worker.
- ☐ 4. Performance usually superior.
- ☐ 5. An unusually competent worker.

Complete the following ONLY if the worker is no longer on the job.

G. What do you think is the reason this person left the job? (It is not necessary to show the official reason if you feel that there is another reason, as this form will not be shown to anybody in the company.)

- ☐ 1. Fired because of inability to do the job.
- ☐ 2. Quit, and I feel that it was because of difficulty doing the job.
- ☐ 3. Fired or laid off for reasons other than ability to do the job (i.e., absenteeism, reduction in force).
- ☐ 4. Quit, and I feel the reason for quitting was not related to ability to do the job.
- ☐ 5. Quit or was promoted or reassigned because the worker had learned the job well and wanted to advance.

RATED BY	TITLE	DATE
COMPANY OR ORGANIZATION	LOCATION (*City, State, ZIP Code*)	

GPO 883-716

MA 7-66
Apr. 1973

S-473R82

APPENDIX 5

JOB DUTIES

JOB TITLE: Twenty-One Dealer (amuse. & rec.) 343.467-018

Guide for Occupational Exploration (G.O.E.) Code 09.04.02 Sales Services

JOB SUMMARY: Controls activities at blackjack table in gambling casino. Shuffles four decks of playing cards following prescribed procedure and positions cards in shoe. Deals cards from shoe to players and self according to game rules and casino regulations. Calls out value of each player's cards and deals extra cards according to player's instructions. Views point values of players and own cards to determine winner of playing hand according to rules of game. Collects chips of losing wagers and pays out winning bets to players. Exchanges players' currency for chips, used exclusively at table.

WORK PERFORMED: Opens blackjack table. Counts chips in tray to verify total. Opens four decks of playing cards. Removes nonplaying cards such as jokers and advertisement cards. Visually examines each card for defects such as misprints, discolorations and markings. Inserts examined decks into discard holder. Mixes playing cards by placing both hands palms down on cards and moving hands in revolving motion (chimmy shuffle).

* Riffle shuffles cards. Mixes playing cards by holding one-half of playing cards with each hand, positioning cards against each other, raising and releasing cards with thumbs to alternately place cards into one stack. Hands cut card to specified blackjack player for insertion into stacked cards to cut deck of cards. Places rear cards at front of deck to complete cutting of cards. Inserts deck into shoe.

Deals cards. Scans bet spots on table layout to identify chips denoting number and location of players at table. Slides cards from shoe onto table, turns card to expose point value to all players and positions card face up in front of first player's wagered chip(s). Repeats procedure clockwise around table to all players and dealer until each participant has two cards.

* Controls play of game. Mentally computes total point value of cards. Repeats dealing cards to player until player indicates no card or point value of cards exceeds 21. Repeats playing procedure to each player around table clockwise. Calls out dealer card value to players and draws cards from shoe when value of cards is under 16. Stands pat if original value is 17 or higher. Distributes chips to players still in game when dealer's point total exceeds 21. Calls out dealer's point total and collects player's wager when point total is less than dealer's. Scoops up cards upon completion of game.

* Exchanges money into chips. Grasps stack of chips from tray, fingers and stacks chips in equal value to bill(s) in a prescribed manner and slides across table to buyer. Slides bill(s) into drop box using a paddle.

S-473R82

JOB TITLE: Dice (Craps) Dealer (amuse. & rec.) 343.467-018

Guide for Occupational Exploration (G.O.E.) Code 09.04.02 Sales Services

JOB SUMMARY: Controls activities at craps table in gambling casino, working as member of rotating four-person team: Distributes dice to shooter, using stick; positions players' chips on layout of table according to bets specified and repositions chips when required by rules of game; calls out point total of rolled dice and winning and losing bets; collects losing bets; mentally computes winning payouts based upon payout odds and sum wagered, using memorized formulas; informs players of various types of bets between rolls of dice to encourage betting; constantly views table layout to prevent cheating; exchanges currency for chips used in game; and explains rules and regulations of game to unknowlegeable players.

WORK PERFORMED

Stickman Position: Controls stick. Picks up and manipulates stick to grasp five
* dice with curved stick and moves dice around table to the shooter for selection of two of the five dice that will be used in game. Grasps remaining three dice with stick and moves dice to home plate. Views dice in shooter's hand and visually follows course of dice thrown down table. Calls out numberical total of dice. Grasps dice with stick to await shooter's next roll, while dealers are collecting and paying off bets. Sticks dice to shooter for next roll.

* Maintains proposition bets section of table layout. Collects chips wagered on losing bets. Rapidly computes payoff on winning proposition bets based on amount of wager and odds on bet using memorized formulas. Identifies winners around table by chip locations on layout of winning bets and point stick at winner(s) sequentially informing dealers of sum to be paid each winner.

* Annouces winning and losing bets. Identifies numerical count of dice rolled by shooter. Calls out total number and winning and losing bets to assist the dealers in payouts, chip movement on layout, and collection of wagered bets.

Encourages wagering. Announces various types of proposition bets to maintain player enthusiasm in game.

Dealer Position:

* Sells chips to player. Picks up and counts bills or hand bills to boxman to count. Computes number of chips to match value of customer's bills. Grasps, stacks and pushes chips to purchase player in prescribed manner.

* Collects and pays out wagers. Listens to stickman announce numerical total of thrown dice. Visually locates losing bets on table layout. Grasps chips and slides to dealer's position. Identifies location on layout of winning bets and rapidly calculates amount of payout for each winning bet using memorized formulas according to rules of game. Grasps and positions stacks of appropriately valued chips, fingers chips in a prescribed manner and pushes to winning bettor's location.

* Miscellaneous tasks. Informs player placing bet disallowed by game rules and casino regulations. Advises unknowledgeable players of opportunity to play "odds bet up to amount of original come, don't come, pass or don't pass wager".

S-473R82

JOB TITLE: Roulette Dealer (amuse. & rec.) 343.467-018

Guide for Occupational Exploration (G.O.E.) Code 09.04.02 Sales Services

JOB SUMMARY: Controls activities at roulette table in gambling casino. Exchanges chips, used exclusively at table, for players' currency; positions chips for players seeking to place combination bets; spins ball and wheel; visually identifies ball location in wheel slot, and announces corresponding winning number and color; views chips on table layout to identify winning and losing bets; collects chips on losing bets; calculates payouts on winning bets using memorized keys and pays out corresponding value in chips; explains rules of game to unknowledgeable players; exchanges game chips for dollar valued chips when player leaves roulette table.

WORK PERFORMED: Opens roulette table. Computes value of chips at table and verifies against amount recorded on count card.

* Sells chips to players. Computes number of chips to match value of customer's bills. Grasps, stacks and slides chips across table to player in prescribed manner. Inserts bills into drop box using paddle.

Controls games. Calls out "place your bets" while continually observing table layout. Briefly explains different types of bets and payout odds. Inserts right hand into wheel number slot. Grasps ball between thumb and index finger, pushes wheel gently in counterclockwise direction, moves hand in clockwise direction while releasing ball under rim of wheel to set ball and wheel in motion.

* Collects and pays out on bets. Listens as ball drops into slot on wheel and glances into wheel to identify number and color of slot in which ball is seated. Positions layout marker atop corresponding number on table layout to identify winning and losing bets. Rakes in losing chips in prescribed manner. Rapidly calculates payout of winning wagers in prescribed sequence, using memorized keys. Pushes chips over table to winning player.

Mucks chips. Stacks chips in holding area according to color and pattern.

* Cashes out player's chips. Exchanges game chips for dollar valued chips when player leaves table.

S-473R82

JOB TITLE: Baccarat Dealer (amuse. & rec.) 343.467-018

Guide for Occupational Exploration (G.O.E.) Code 09.04.02 Sales Services

JOB SUMMARY: Controls activities at baccarat table in gambling casino. working as member of rotating four-person team. Chimmy, riffle, and lace shuffles prescribed number of decks of playing cards and inserts into shoe. Passes shoe to specified player and calls out point values of bank and player cards dealt from shoe. Calls for additional cards when prescribed by game rules, and announces winner of playing hand. Collects and pays out chips accordingly. Computes house commission on winning bank wages and positions marker button on table layout to identify player and amount owed. Periodically collects commission owed by players. Sells chips used at table to players.

WORK PERFORMED:

Shoeman Tasks: Shuffles cards. Positions individual deck of cards face
* down on table. Scans each card for defects such as misprints and marks and removes defective cards from deck. Shuffles eight decks of playing cards in prescribed manner. Hands cut cards to specified player to cut deck. Inserts cards into shoe. Pushes shoe to player controlling bank (banker) or to first player counterclockwise around table at start of game.

Controls play of game. Observes player controlling shoe (banker). Scans cards to identify point values. Announces totals and identifies winner of game according to rules of the game.

* Sells chips to players. Scans currency placed by player. Computes number of chips of specified denomination required to equal currency and grasps stacks of chips from tray using fingers in prescribed manner. Lifts paddle from drop box and deposits currency.

Dealer Tasks: Collects and pays out wagers. Listens to shoeman announce
* game winner and scans table layout to identify losing and winning wagers. Positions hands, palms down, and rakes in chips on losing bets to chip stacking area. Positions stack of chips next to winning bets, slides index finger over wagered chips and through stack to pay out equal number of chips.

* Computes and collects house commission. Scans winning chips on table layout when bank wins. Computes house commission (5%) on each bet. Requests commission payment from players, informing players of amount owed.

---

* These job duties are designated as critical since they must be performed competently if the job is to be performed in a satisfactory manner.

APPENDIX 6

Training Course Outline

Twenty-One — 160 Hours

A. Orientation
   1. Casino Career Institute
   2. Game of Blackjack

B. Casino Policies
   1. State Regulations
   2. Casino Rules and Regulations

C. Opening and Closing the Game
   1. Equipment Inventory
   2. Financial Accountability

D. Game Rules and Regulations
   1. Dress and Appearance
   2. Customer Relations
   3. Minimum and Maximum Limits
   4. Interim Reports
   5. Interim Fills
   6. Procedure for Advances
   7. Method of Making Pay Outs
   8. Stance and Position of Dealers

E. Duties and Responsibilities of Dealer
   1. Chip tray adequately filled
   2. Players' contentment
   3. Insure correctness
   4. Regulate speed of game

F. Chip Handling
   1. Chip Cutting
      a. Two color pay outs
      b. Three color pay outs
      c. Method of Blackjack pay outs
      d. Method of Insurance pay outs
   2. Chip Conversion
   3. Chip Exchange

G. Card Shuffling
   1. Shoe Loading
   2. Card Cutting

H. Card Dealing
   1. Style and Speed
   2. Pushing and Gripping
   3. Card Box Positioning
   4. Splitting Pairs
   5. Doubling Procedure
   6. To Three Players
   7. To Five Players

8. To a Full Complement
9. Take and Pay Procedures
10. Hitting Low Hand
11. Procedure to Make Pay Outs
12. Insurance Pay Outs
13. Card Totaling

I. Accounting Procedures
1. Advances to the Table
2. Returns to the Cage
3. Change Procedure
4. Credit Procedure

J. Security
1. Equipment
2. Money

K. Dress, Appearance and Conduct

L. Customer Relations

Dice 240 Hours

A. Orientation
   1. Casino Career Institute
   2. Game of Craps

B. Casino Policy
   1. State regulations
   2. Casino rules and procedures

C. Opening the Game
   Inventory
   a. Equipment
   b. Chips
   c. Money

D. Closing the Game
   Inventory
   a. Equipment
   b. Chips
   c. Money

E. Game Rules and Procedures
   1. Winning bets
   2. Losing bets
   3. Proposition bets
   4. PLACE betting pay outs
   5. Take and pay
   6. Cash change
   7. Color change
   8. Advances to the table
      a. Credit slips
      b. Interim fills
   9. Returns from the table
   10. Player's markers

F. Duties, Functions and Responsibility of the Craps Crew
   1. Base dealer
      a. Insures accuracy of all procedures
      b. Prevents any deviation from casino policies and procedures
      c. Watches player money
      d. Deals openly so boxman can read pay outs

   2. Boxman
      a. Supervises and gives constant surveillance to dealers
      b. Keeps account of players' betting transactions
      c. Constantly checks for accuracy
      d. Handles all complaints and makes all first line decisions
      e. Controls the game at all times

   3. Stickman
      a. Gives constant surveillance to dice and the area in which they are thrown
      b. Promotes proposition betting
      c. Keeps players enthused
      d. Checks for accuracy in pay outs
      e. Regulates speed of game
      f. Ability to handle stick
      g. Command of traditional stickman's jargon

G. Layout Memorization
   1. Stickman's proposition
   2. Second base
   3. Third base
   4. Dice odds
   5. Off and on situations

H. Bets
   1. Need for a good background in fundamentals of math
   2. Need for memorization of odds
   3. Kinds
      a. PASS LINE
         Odds at players' option
      b. DON'T PASS
         Odds at players' option
      c. COME
         Odds at players' option
      d. DON'T COME
         Odds at players' option
      e. FIELD
      f. BIG SIX
      g. BIG EIGHT
      h. PLACE
      i. HARDWAY
         Proposition betting
      j. CRAPS
         Proposition betting
      k. ELEVEN
         Proposition betting
      l. BUY
      m. LAY
      n. CALL

I. Chip Handling
   1. Chip Cutting exercises
      a. Drop one and cut
      b. One to five bridge
      c. Index picking of chips
      d. Sizing into chips - two, three, four or five high

J. Use of Credit Markers

K. Accounting Procedures
   1. Advances to table
   2. Returns from table

L. Security
   1. Game equipment
   2. House and player money

M. Dress, Appearance and Conduct of Dealer

N. Customer Relations

Roulette — 200 Hours

A. Orientation
   1. Casino Career Institute
   2. Game of Roulette

B. Casino Policy
   1. State regulations
   2. Casino rules and regulations

C. Procedures for Opening and Closing the Game
   1. Equipment inventory
   2. Financial accountability

D. Game Rules and Procedures
   1. Odds on betting
   2. Pay out procedures
   3. Method of clearing the table

E. Duties and Responsibilities of Dealer
   1. Regulate game speed
   2. Player contentment
   3. Insure accuracy of pay outs
   4. Adequate chip fill

F. Layout Memory

G. Kinds of Bets
   1. COLUMN
   2. LOW or HIGH, RED or BLACK, ODD or EVEN
   3. DOZEN
   4. SIXLINE
   5. STREET
   6. CORNER
   7. SPLIT
   8. STRAIGHT UP

H. Chip Handling
   1. Mucking chips
   2. Pushing chips to player
   3. Pulling chips from rack
   4. Stacking chips in 20's by feel
   5. Cutting down chips into unit size
   6. Push cutting
   7. Drop cutting

I. Procedures Involved in Spinning Ball
   1. Two-fold reverse spin action
   2. Technique in gripping the ball

J. Use of Credit Markers

K. Accounting Procedures
   1. Advances to the table
   2. Returns from the table

L. Security Procedures
   1. Equipment security
   2. Game security
      a. Protection of player money
      b. Protection of house money

M. Dress, Appearance and Conduct

N. Customer Relations

Baccarat 200 Hours

A. Orientation
   1. Casino Career Institute
   2. Game of Baccarat

B. Casino Policy
   1. CALL bets
   2. State regulations
   3. Change of staff at table

C. Procedures for Opening Game
   1. Inventory of equipment
   2. Inventory of money

D. Procedures for Closing Game
   1. Inventory of equipment
   2. Inventory of money
   3. Cashing in table

E. Game Rules and Procedures
   1. Rules
   a. Card values
   b. Hand values
   c. Player's hand rules
   d. Bank's hand rules

   2. Procedures
   a. Making change
   b. Commission deduction
   c. Payment of wins
   d. Advances to table
   e. Returns from table
   f. Take and pay

F. Duties of Dealer
   1. Senior dealer
      Card calling
   2. Dealer
      Card calling

G. Baccarat Jargon

H. Chip Handling
   Chip Cutting Exercises
   a. Drop one and cut
   b. One to five bridge
   c. Index picking of chips
   d. Sizing into chips - two, three, four or five high

I. Card Shuffling
   1. Chimmy shuffle
   2. Riffle shuffle
   3. Cutting cards
   4. Loading shoe

J. Use of Credit Markers

K. Security
   1. Equipment
   2. House money
   3. Player money

L. Dress, Appearance and Conduct

M. Customer Relations

* U.S. GOVERNMENT PRINTING OFFICE: 1982 – 0 – 361-270/4948